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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,145	07/03/2003	Rie Yamane	239928US90	3348

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EXAMINER

BOLDEN, ELIZABETH A

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/612,145

Applicant(s)

YAMANE ET AL.

Examiner

Elizabeth A. Bolden

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-24 is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copies have been filed in parent Application No. 10/612,145, filed on 14 January 2004.

#### ***Claim Objections***

Claim 2 is objected to because of the following informalities: minor typographical error.

In claim 2 the claim ends in a semicolon, this should be replaced with a period. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 is rendered indefinite since the language is unclear. The phrase starting with "in the spectral... 0.1 to 0.8 mm" is unclear as to if the transmittance is 50 % at 615 nm or 400 to 700 nm. Additionally, it is unclear if the glass can have a thickness anywhere between 0.1 to 0.8 mm as long as the transmittance from 400 to 700 or 615 nm is at 50 %. Furthermore, is the thickness that the glass is to have a 50% transmittance at

Art Unit: 1755

615 nm is the same thickness for the transmittances measured at 400 nm, 800-1000 nm, and 1200 nm?

Claim 7 is indefinite because no specific composition for the material is set forth.

"An article characterized by physical properties alone and no specific composition is vague and indefinite". See *Ex parte Slob*, 157 USPQ 172. Claim 7 defines the near-infrared light-absorbing glass in terms of properties only.

Claim 7 is rejected since it is unclear whether the transmittance being higher or lower than 50% then the wavelength at 50% transmittance is at a wavelength less than 630 nm is limited to the region of 400 to 700 nm.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4-7, and 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita, U.S. Patent 4,303,298.

Yamashita teaches a near infrared absorption glass filter in terms weight percent. See abstract, column 1, lines 34-50. Yamashita teaches that the optical glass show a

Art Unit: 1755

transmittance curve wherein the glass transmits in the visible region and absorbs in the near IR region. See abstract, Figure 1, and column 2, lines 52-60.

Yamashita fails to teach any examples or compositional ranges that are sufficiently specific to anticipate the compositional and property limitations of claims 1, 2, 4-7, and 10-16. Yamashita does not teach the glass in terms of cation percent. However, it is believed that the weight percent ranges disclosed by Yamashita if converted to cation percent would have overlapping compositional ranges with instant claims 1, 2, 4-7, and 10-16. See column 1, lines 41-50. Overlapping ranges have been held to establish *prima facie* obviousness. MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges disclosed by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the properties recited in claims 4-7 and 16.

Claims 7, 9, 12, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oguma, U.S. Patent 6,225,244.

Oguma teaches a near infrared absorption glass filter. See abstract, column 2, lines 25-41. Oguma teaches that the optical glass show a transmittance curve wherein the glass transmits in the visible region and absorbs in the near IR region. See abstract, Figure 2, and column 6, lines 49-65.

Art Unit: 1755

Oguma fails to teach any examples or compositional ranges that are sufficiently specific to anticipate the compositional and property limitations of claims 7, 9, 12, 15, and 16. However, it is believed that the compositional and property ranges disclosed by Oguma overlap compositional and property ranges with instant claims 7, 9, 12, 15, and 16. See column 2, line 25 to column 3, line 18. Overlapping ranges have been held to establish *prima facie* obviousness. MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges disclosed by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oguma, U.S. Patent 5,668,066.

Oguma teaches a near infrared absorption glass filter. See abstract, column 1, lines 50-64. Oguma teaches that the optical glass show a transmittance curve wherein the glass transmits in the visible region and absorbs in the near IR region. See abstract, Figure 1, and column 5, lines 22-32. Oguma teaches that the glass has a liquidus temperature less than 900°C.

Oguma fails to teach any examples or compositional ranges that are sufficiently specific to anticipate the compositional and property limitations of claims 1-16. Oguma does not teach the glass in terms of cation percent. However, it is believed that the weight percent ranges disclosed by Oguma if converted to cation percent would have overlapping compositional ranges with instant claims 1-16. See column 1, lines 50-62.

Art Unit: 1755

Overlapping ranges have been held to establish *prima facie* obviousness. MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges disclosed by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

#### ***Allowable Subject Matter***

Claims 17-24 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art fail to disclose or suggest a copper-containing glass comprised of either a fluorophosphates glass or phosphate glass, which comprises copper (CuO), iron (Fe<sub>2</sub>O<sub>3</sub>), antimony (Sb<sub>2</sub>O<sub>3</sub>) and no arsenic.

#### ***Conclusion***

The additional references cited on the 892 have been cited as art of interest since they are considered to be cumulative to or less than the art relied upon in the rejections above.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Bolden whose telephone number is 571-272-1363. The examiner can normally be reached on 9:30 am-6:00 pm.

Art Unit: 1755

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EAB  
18 April 2005

  
**KARL GROUP**  
**PRIMARY EXAMINER**  
**GROUP 1755**